

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known

Application Number	10/597,888
Filing Date	August 3, 2006
First Named Inventor	Jeffrey RUBERTI
Art Unit	2627
Examiner Name	Not Yet Assigned
Attorney Docket Number	20780-025

Sheet 1 of 6

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number/Kind Code ² (if known)			
	A1	3,875,302	04/01/1975	Inoue	
	A2	4,472,542	09/18/1984	Nambu	
	A3	4,663,358	05/05/1987	Hyon	
	A4	4,772,287	09/20/1988	Ray	
	A5	4,904,260	02/27/1990	Stoy	
	A6	5,047,055	09/10/1991	Bao	
	A7	5,071,437	12/10/1991	Steffee	
	A8	5,260,066	11/09/1993	Wood	
	A9	5,288,503	02/22/1994	Wood	
	A10	5,534,028	07/09/1996	Bao,	
	A11	5,705,296	01/06/1998	Kamauchi	
	A12	5,731,005	03/24/1998	Ottoboni	
	A13	5,880,216	03/09/1999	Tanihara	
	A14	5,976,186	11/02/1999	Bao	
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	A16	6,264,695	07/24/2001	Stoy	
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Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	†*
		Country Code ³ Number ⁴ Kind Code ⁵ (if known)				
	B1	WO 01/12107 AI	02/22/2001	LAMBRECHT	English	
	B2	WO 02/054978 A2	07/18/2002	LAMBRECHT	English	
	B3	JP 04 338326A	11/25/1992	OKAMURA	W/English Translation	
	B4	JP 03215417A	09/20/1991	YAMAUCHI et al.	W/English Translation	
	B5	EP 1229873	08/14/2002	MARCOLONGO	English	

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Substitute for form 1449/PTO		Complete if Known Application Number: 10/597,688 Filing Date: August 3, 2006 First Named Inventor: Jeffrey RUBERTI Art Unit: 2627 Examiner Name: Not Yet Assigned Attorney Docket Number: 20780-025	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>			
Sheet	2	of	6

NON PATENT LITERATURE DOCUMENTS			
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	C1	AAOS, Musculoskeletal Conditions in the U.S., Feb. 1992-1988, 1992, AAOS	
	C2	Bao, Q.B., & Yuan, H. A., "Nucleus Replacement," Spine, Vol. 27, No. 11, 2002, 1245-1247	
	C3	Bao, Q. & Yuan, H.A., "Prosthetic Disc Replacement: The Future?," Clinical Orthopaedics and Related Research, No. 394, pp 139-145, 2002	
	C4	Zeegeers, W. S., et al, "Artificial disc replacement with the modular type SB Charit III: 2-year results in 50 prospectively studied patients," Eur Spine J, 8:210-217, 1999	
	C5	Wiesel, S.W. et al, "Industrial Low-Back Pain-A Prospective Evaluation of a Standardized Diagnostic and Treatment Protocol," SPINE, Vol. 9, No. 2, 199-203, 1984	
	C6	Vago, R., "Novel Natural Materials for Bone Substitutes and Hard Tissue Remodeling," http://www.bgu.ac.il/bgn/bone.html	
	C7	Bao, Q. et al, "The artificial disc: theory, design and materials," Biomaterials Vol. 17, No. 12, (1996) 1157-1167	
	C8	Urushizaki, F. et al, "Swelling and mechanical properties of poly(vinyl alcohol) hydrogels," International Journal of Pharmaceutics, 58 135-142, 1990	
	C9	UPMC Surgeons Implanting Metal Cages into the Spine to Treat Chronic Low Back Pain, Neurosurgery News, 1999, University of Pittsburgh	
	C10	Takeshita, H. et al, "Gelation Process and Phase Separation of PVA Solutions as Studied by a Light Scattering Technique," Macromolecules 32, 7815-7819, 1999	
	C11	Oka, M. et al, "Development of artificial articular cartilage," Proc Instn Mech Engrs Vol. 214 Part H, 59-68, 2000	
	C12	Onuki, A. & Puri, S., "Spinodal decomposition in gels," Physical Review E, Vol. 59, No. 2, Feb. 1999, R1331-R1334	
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	C14	Takeshita, H. et al, "Small-angle neutron scattering studies on network structure of transparent and opaque PVA gels," Physica B 311 (2002) 78-83	
	C15	Lozinsky, V. I. et al, "Swelling behavior of poly(vinyl alcohol) cryogels employed as matrices for cell immobilization," Enzyme Microb. Technol., Vol. 18, 561-569, 1996	
	C16	Juarez, K.K. & An, H.S., "Artificial Disc Replacement," Spineuniverse.com	

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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C17	Kawanishi K. et al, "Thermodynamic consideration of the sol-gel transition in polymer solutions," 35 th Annual Meeting of the Society of Polymer Science, Japan, 1986	
	C18	"New Implants Offer Relief of Spine 2001, Medical Device and Diagnostic Industry	
	C19	Takeshita, H., et al, "Spinodal Decomposition and Syneresis of PVA Gel, Macromolecules 2001, 34, 7894-7898	
	C20	Diwan, A. D. et al, "Current Concepts in Intervertebral Disk Restoration," Tissue Engineering in Orthopedic Surgery, Vol. 31, No. 3, pp 453-464, July 2000	
	C21	Peppas, N. A. et al, "Physicochemical Foundations and Structural Design of Hydrogels in Medicine and Biology," Annu. Rev. Biomed. Eng., 02:9-20, 2000	
	C22	Willcox, P. J., et al, "Microstructure of Poly(vinyl alcohol) Hydrogels Produced by Freeze/Thaw Cycling, Journal of Polymer Science: Part B: Polymer Physics, Vol. 37, 3438-3454 (1999)	
	C23	Bray, J.C. & Merrill, E. W., "Poly(vinyl alcohol) Hydrogels for Synthetic Articular Cartilage Material, Biomed. Mater. Res., Vol. 7, pp. 431-443 1973	
	C24	Stammen, J. A., et al, "Mechanical properties of a novel PVA hydrogel in shear and unconfined compression," Biomaterials, 2001 Apr 22 (8), 799-806, abstract only	
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	C27	Hong, P. et al, "Effects of Mixed Solvent on Gelation of Poly(vinyl alcohol) Solutions," Journal of Applied Polymer Science, Vol 79, Issue: 6, Date: 7 February 2001, Pages: 1113-1120	
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	C29	Griffith, S. L. et al, "A Multicenter Retrospective Study of the Clinical Results of the LINK® SB Charite Intervertebral Prosthesis," SPINE, Vol. 19, No. 16, 1842-1849, 1994	
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	C32	Choi, J. H., et al., "Rheological Properties of Syndiotacticity-Rich Ultrahigh Molecular Weight Poly(vinyl alcohol) Dilute Solution," Journal of Applied Polymer Science, Vol. 82, 569-576 (2001)	
	C33	Doehring, T.C. et al, "Cyclic Load-Displacement Characteristics of Lumber Functional Spinal Units, 46 th Annual Meeting, Orthopaedic Research Society, March 12-15, 2000	
	C34	Damshkaln, L. G., et al, "Study of Cryostructuration of Polymer Systems. XV. Freeze-Thaw-Induced Formation of Cryoprecipitate Matter from Low-Concentrated Aqueous Solutions of Poly(vinyl alcohol), Journal of Applied Polymer Science, Vol. 74, 1978-1986 (1999)	
	C35	Darwis, D., et al, "Characterization of poly(vinyl alcohol) hydrogel for prosthetic intervertebral disc nucleus," Radiation Physics and Chemistry 63 (2002) 539-542	
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	C37	Hassan C., M. et al, "Diffusional characteristics of freeze/thawed poly(vinyl alcohol) hydrogels: Applications to protein controlled release from multilaminar devices," European Journal of Pharmaceutics and Biopharmaceutics 49 (2000) 161-165	
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	C41	Nakane, K., et al, "Properties and Structure of Poly(vinyl alcohol)/Silica Composites, Journal of Applied Polymer Science, Vol. 74, 133-138 (1999)	
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	C43	Hickey, A. S. & Peppas N.A., "Solute diffusion in poly(vinyl alcohol)/poly(acrylic acid) composite membranes prepared by freezing/thawing techniques, Polymer, Vol. 38 No. 24 1997 5931-5936	
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	C47	Marolongo, M., et al, "Novel Hydrogel Copolymers for Intervertebral Disc Replacement," Sixth World Biomaterials Congress Transactions, 2000	
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	C49	Narasimhan, B. & Peppas, N.A., "Molecular Analysis of Drug Delivery Systems Controlled by Dissolution of the Polymer Carrier," Journal of Pharmaceutical Sciences, Vol. 86, No. 3, March 1997	
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